# HYPERTENSION/PREHYPERTENSION

(345)

| PARTICIPANT TYPEA | LL |
|-------------------|----|
| HIGH RISKY        | ES |

### RISK DESCRIPTION:

<u>Hypertension</u> is defined as persistently high arterial blood pressure with systolic blood pressure above 140 mm Hg or diastolic blood pressure above 90mm Hg. Hypertension during childhood is age-specific and is defined as blood pressure readings greater than the 95<sup>th</sup> percentile for age, gender, and height on at least three separate occasions.

Prehypertension is defined as blood pressure readings between 130/80 to 139/89 mm Hg.

Presence of hypertension or prehypertension diagnosed by a physician as self-reported by applicant, participant, or caregiver; or as reported or documented by a physician, or someone working under physician's orders.

## ASK ABOUT:

- Attitude and knowledge about condition and treatment plans including diet and medications
- Barriers to following treatment plan (e.g., health beliefs, religious or cultural practices, finances, access to follow-up health care)
- Dietary supplements including vitamins, minerals, herbal products and targeted nutrition therapy products
- Food-medication interactions
- Weight goal
- Typical dietary pattern compared to the Dietary Guidelines for Americans or the Dietary Approaches to Stop Hypertension (DASH) eating plan
- Typical sodium intake
- Alcohol consumption
- Physical activity pattern
- Use of smoking tobacco products
- Concurrent medical conditions especially diabetes and renal disease

# **NUTRITION COUNSELING/EDUCATION TOPICS:**

### Pregnant Women:

- Hypertension is the most common medical complication of pregnancy, occurring in 7% of all pregnancies. It may lead to low birth weight, fetal growth retardation, and premature delivery as well as maternal, fetal and neonatal morbidity.
- Hypertensive disorders of pregnancy are categorized as follows:
  - Chronic hypertension: Hypertension that was present before pregnancy
  - Preeclampsia: A pregnancy-specific syndrome observed after the 20<sup>th</sup> week of pregnancy (For more information, see the guide for Preeclampsia)
  - Preeclampsia superimposed upon chronic hypertension: Preeclampsia in a woman with chronic hypertension
  - Eclampsia: The occurrence of seizures in a woman with preeclampsia that cannot be attributed to other causes
  - Gestational hypertension: Blood pressure elevation detected for the first time after mid-pregnancy without proteinuria
- The term, pregnancy-induced hypertension, includes gestational hypertension, preeclampsia and eclampsia.

## Breastfeeding Women:

- It is important for hypertensive breastfeeding women to inform their primary care providers of their breastfeeding status if they are also taking medications to control the blood pressure to determine whether the medications pose any risks to the infant.
- Hypertension itself is not a contraindication for breastfeeding. Some research suggests that lactation presents some therapeutic advantages in the management of the disease in women.

#### • Infants and Children:

- Children with high blood pressure are more likely to become hypertensive adults.
- Epidemiologic data suggests an association between childhood obesity and high blood pressure. Aim for a moderate weight loss or preventing further weight gain.
- Dietary changes conducive to weight management in children include:
  - Portion control
  - Decreased consumption of sugar-containing beverages and energy-dense snacks
  - Increased consumption of fresh fruits and vegetables

## NUTRITION COUNSELING/EDUCATION TOPICS (CON'T):

- Infants and Children (con't):
  - Regular meals, especially breakfast
  - Encourage a decrease in time spent in sedentary activities with a subsequent increase in physical activity.

#### • All Participant Categories:

- o People with prehypertension are twice as likely to develop hypertension.
- In hypertensive individuals, dietary intervention is effective in reducing blood pressure levels and delaying drug treatment.
- In prehypertensive individuals, implementing lifestyle changes can prevent or delay the onset of hypertension.
- There is no cure for hypertension, however, lifestyle modifications are critical in its management. This includes overweight or obesity, high sodium intake, excess alcohol consumption, low potassium intake, physical inactivity, smoking and chronic stress).
  - Identify WIC foods encouraged in the Dietary Guidelines for Americans and that are important components of the DASH eating plan (which is rich in fruits, vegetables, low fat dairy, nuts; low in sodium, total fat, saturated fat; adequate calories for weight management).
  - Encourage aerobic physical activity for 30 minutes per day as advised by primary provider.
  - Determine and discuss an eating pattern appropriate for the participant's weight goal (i.e., maintain, gain or lose weight) and categorical status.
    Weight control decreases blood pressure, sensitivity to salt and other cardiovascular risk factors.
- Untreated hypertension leads to many degenerative diseases including congestive heart failure, end-stage renal diseases, and peripheral vascular disease.

### Possible Referrals:

- Refer to the North Dakota Tobacco Quitline
   (<a href="http://www.ndhealth.gov/tobacco/quitline.htm">http://www.ndhealth.gov/tobacco/quitline.htm</a>) at 1-800-QUIT-NOW or 1-800-784-8669 (1-866-257-2971 for the hearing impaired) or North Dakota QuitNet at <a href="http://www.ndhealth.gov/tobacco/quitnet.htm">http://www.ndhealth.gov/tobacco/quitnet.htm</a>.
- Refer to community smoking cessation programs.

# Possible Referrals (con't):

- If the participant is taking any non-prescribed vitamin or mineral supplements, herbal supplements, or targeted nutrition therapy products, advise discussing these with the primary care provider.
- If the participant does not have an ongoing source of health care, refer to primary care providers in the community or the local public health department.